#### I. OVERVIEW OF THE FUNDING OPPORTUNITY

**Program Announcement for the Department of Defense** 

**Defense Health Program** 

**Congressionally Directed Medical Research Programs** 

# Amyotrophic Lateral Sclerosis Research Program Therapeutic Development Award

**Announcement Type: Initial** 

Funding Opportunity Number: W81XWH-18-ALSRP-TDA

Catalog of Federal Domestic Assistance Number: 12.420 Military Medical Research and Development

#### SUBMISSION AND REVIEW DATES AND TIMES

- **Pre-Application Submission Deadline:** 5:00 p.m. Eastern time (ET), June 22, 2018
- **Invitation to Submit an Application:** August 2018
- **Application Submission Deadline:** 11:59 p.m. ET, October 11, 2018
- End of Application Verification Period: 5:00 p.m. ET, October 16, 2018
- **Peer Review:** December 2018
- **Programmatic Review:** January 2019

This Program Announcement must be read in conjunction with the General Application Instructions, version 20180329. The General Applications Instructions document is available for downloading from the Grants.gov funding opportunity announcement by selecting the "Package" tab, clicking "Preview," and then selecting "Download Instructions."

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# II. DETAILED INFORMATION ABOUT THE FUNDING OPPORTUNITY

New for 2018: Application submission by extramural organizations through Grants.gov requires use of the Workspace interface, which separates the application package into individual forms. Applicants must create a Workspace in Grants.gov, complete the required forms, and submit their application Workspace package.

#### **II.A. Program Description**

Applications to the Fiscal Year 2018 (FY18) Amyotrophic Lateral Sclerosis Research Program (ALSRP) are being solicited for the Defense Health Agency (DHA) J9, Research and Development Directorate, by the U.S. Army Medical Research Acquisition Activity (USAMRAA) using delegated authority provided by United States Code, Title 10, Section 2358 (10 USC 2358). As directed by the Office of the Assistant Secretary of Defense for Health Affairs (OASD[HA]), the DHA manages the Defense Health Program (DHP) Research, Development, Test, and Evaluation (RDT&E) appropriation. The execution management agent for this Program Announcement is the Congressionally Directed Medical Research Programs (CDMRP). The ALSRP was initiated in 2007 to provide support for research of exceptional scientific merit aimed at the preclinical assessment of therapeutics for amyotrophic lateral sclerosis (ALS). Appropriations for the ALSRP from FY07 through FY17 totaled \$69.4 million (M). The FY18 appropriation is \$10M.

#### **II.B.** Award Information

The Therapeutic Development Award supports research ranging from validation of therapeutic leads to U.S. Food and Drug Administration (FDA) Investigational New Drug (IND)-enabling studies. The proposed studies are expected to be empirical in nature and product-driven. **Applicants with limited ALS experience are** *strongly encouraged* **to collaborate with those having substantial expertise in ALS research and/or ALS model systems.** Examples of activities that will be supported by this award include:

- Confirmation of candidate therapeutics obtained from screening or by other means, including optimization of potency and pharmacological properties and testing of derivatives and sister compounds
- Validation of early pilot studies, including the use of multiple ALS model systems and/or replicating preliminary data with more time points or additional doses
- Studies on formulation and stability leading to Good Manufacturing Practice (GMP) production methods
- IND-enabling studies, to include compound characterization, absorption, distribution, metabolism, and excretion (ADME) studies, and dose/response and toxicology studies in relevant model systems

Validation of treatment approaches in appropriately powered and controlled studies using biological correlates of disease activity and progression in **pre-existing**, **de-identified** human specimens from well-characterized patient cohorts is encouraged. Examples of acceptable cohorts for study include controlled clinical trials, observational studies, and registries (e.g., Centers for Disease Control and Prevention National ALS Registry and/or Biorepository; <a href="https://wwwn.cdc.gov/als/">https://wwwn.cdc.gov/als/</a>). Active duty military and/or Veteran patient populations or resources should be considered. **All specimens must exist at the time of application submission**; **collection of new specimens** will not be supported.

Applications supported by this award must begin with lead compounds in hand and *must include preliminary data relevant to the phase of development,* such as:

- Proof of identity and purity
- Selectivity for the intended target over closely related targets
- Availability of primary and secondary in-vitro bioactivity assays for optimization or structure-activity relationship studies
- Availability of proof-of-concept efficacy data in appropriate preclinical model systems of ALS, including whole animal and cellular model systems, or informative clinical data from a related human disease

Investigators interested in basic research focused on ALS drug discovery are encouraged to apply for the FY18 ALSRP Therapeutic Idea Award (Funding Opportunity Number: W81XWH-18-ALSRP-TIA), which does not require preliminary data (http://cdmrp.army.mil/funding/alsrp).

Therapeutically Relevant Marker Option (New for FY18!): The FY18 ALSRP Therapeutic Development Award Therapeutically Relevant Marker Option encourages applicants to develop a specific marker(s) in parallel with the advanced therapeutic development effort. Additional funding, as described in Section II.D.5, Funding Restrictions, is being offered for the codevelopment of markers that will enhance the drug development process. Efforts may include development of objective pharmacodynamic biomarkers to measure the biological effect of an investigational therapeutic or predictive/cohort-selective biomarkers that indicate whether a specific therapy will be effective in an individual patient or patient subgroup. Development of markers for the purposes of diagnosis, prognosis, or measurement of disease progression without consideration of the therapeutic development process will not be supported. To apply for this option, applicants must submit a Therapeutically Relevant Marker Statement (see Attachment 11) that clearly describes the marker and its potential to improve the efficacy of the therapeutic development process. For further description, see Section II.D.2.b.ii, Full Application Submission Components. Before preparing a Therapeutically Relevant Marker Statement, applicants are encouraged to review the draft guidance issued by the FDA titled, "Amyotrophic Lateral Sclerosis: Developing Drugs for Treatment," as well as the patient-focused document developed by the ALS community titled, "Drug Development for Amyotrophic Lateral Sclerosis Guidance for Industry," which provides direction beyond the FDA guidance and includes the community consensus on key therapeutic development topics.

Licensing and Commercialization Partners: Applicants are encouraged to identify and foster relationships with potential licensing and commercialization partners early in the therapeutic development process. Biotechnology or pharmaceutical companies intending to apply for the Therapeutic Development Award are encouraged to leverage their own resources to complement the funding provided by this award. Participating organizations should ensure the success of the collaboration by resolving potential intellectual and material property issues and by removing organizational barriers that might interfere with achieving high levels of cooperation. Letters confirming/supporting the collaboration are required.

Research involving human subjects and human anatomical substances is permitted; however, clinical trials will not be supported under this Program Announcement. For more information on unique human subject or anatomical substance requirements for research funded through the DoD, including an explanation of "exempt status," refer to the Human Resources Research FAQs available on the electronic Biomedical Research Application Portal (eBRAP) at <a href="https://ebrap.org/eBRAP/public/Program.htm">https://ebrap.org/eBRAP/public/Program.htm</a>. For more information on the definition of a clinical trial and clinical research, refer to the <a href="https://ebrap.org/eBRAP/public/Program.htm">Human Subject Resource Document</a> provided on eBRAP.

The proposed research must be relevant to active duty Service members, Veterans, military beneficiaries, and/or the American public.

The anticipated direct costs budgeted for the entire period of performance for an FY18 ALSRP Therapeutic Development Award will not exceed \$1,000,000, or \$1,250,000 if applying under the Therapeutically Relevant Marker Option. Refer to Section II.D.5, Funding Restrictions, for detailed funding information.

The types of awards made under the Program Announcement will be assistance agreements (grants or cooperative agreements). The level of involvement on the part of the Department of Defense (DoD) during project performance is the key factor in determining whether to award a grant or cooperative agreement.

Extramural Organizations: An assistance agreement (grant or cooperative agreement) is appropriate when the Federal Government transfers a "thing of value" to a "state, local government," or "other recipient" to carry out a public purpose of support or stimulation authorized by a law of the United States, instead of acquiring property or service for the direct benefit and use of the U.S. Government. An assistance agreement can take the form of a grant or cooperative agreement. If "no substantial involvement" on the part of the funding agency is anticipated, a grant award will be made (31 USC 6304). Conversely, if substantial involvement on the part of the funding agency is anticipated, a cooperative agreement will be made (31 USC 6305) and the award will identify the specific substantial involvement. Substantial involvement may include collaboration, participation, or intervention in the research to be performed under the award. The award type, along with the start date, will be determined during the negotiation process.

Research Involving Human Anatomical Substances, Human Subjects, or Human Cadavers: All DoD-funded research involving new and ongoing research with human anatomical substances, human subjects, or human cadavers must be reviewed and approved by

the U.S. Army Medical Research and Materiel Command (USAMRMC) Office of Research Protections (ORP), Human Research Protection Office (HRPO), prior to research implementation. This administrative review requirement is in addition to the local Institutional Review Board (IRB) or Ethics Committee (EC) review. Local IRB/EC approval at the time of submission is *not* required. The HRPO is mandated to comply with specific laws and requirements governing all research involving human anatomical substances, human subjects, or human cadavers that is supported by the DoD. These laws and requirements will necessitate information in addition to that supplied to the IRB/EC. Allow a minimum of 2 to 3 months for HRPO regulatory review and approval processes. When possible, protocols should be written for research with human subjects and/or human anatomical substances that are specific to the DoD-supported effort outlined in the submitted application. Submission to HRPO of protocols covering more than the scope of work in the DoD-funded award will require HRPO review of the entire protocol as DoD-supported research and may include extensive modifications to meet DoD human subjects protection requirements. Refer to the General Application Instructions, Appendix 1, and the Human Subject Resource Document available on the eBRAP "Funding Opportunities & Forms" web page (https://ebrap.org/eBRAP/public/Program.htm) for additional information.

**Use of DoD or VA Resources:** If the proposed research involves access to active duty military patient populations and/or DoD resources or databases, the PI is responsible for demonstrating such access at the time of application submission and should develop a plan for maintaining access as needed throughout the proposed research. Access to target active duty military patient population(s) and/or DoD resource(s) or database(s) should be confirmed by including a letter of support, signed by the lowest-ranking person with approval authority.

If the proposed research involves access to VA patient populations, VA study resources and databases, and/or VA research space and equipment, VA PIs must have a plan for obtaining and maintaining access throughout the proposed research. Access to VA patients, resources, and/or VA research space should be confirmed by including a letter of support from the VA Facility Director(s) or individual designated by the VA Facility Director(s), such as the Associate Chief of Staff for Research and Development (ACOS/R&D) or Clinical Service Chief. If appropriate, the application should identify the VA-affiliated non-profit corporation (NPC) as the applicant institution for VA PIs. If the VA NPC is not identified as the applicant institution for administering the funds, the application should include a letter from the VA ACOS/R&D confirming this arrangement and identifying the institution that will administer the funds associated with the proposed research.

Access to certain DoD or VA patient populations, resources, or databases may only be obtained by collaboration with a DoD or VA investigator who has a substantial role in the research and may not be available to a non-DoD or non-VA investigator if the resource is restricted to DoD or VA personnel. Investigators should be aware of which resources are available to them if the proposed research involves a non-DoD or non-VA investigator collaborating with the DoD and/or VA. If access cannot be confirmed at the time of application submission, the Government reserves the right to withdraw or revoke funding until the PI has demonstrated support for and access to the relevant population(s) and/or resource(s).

Research Involving Animals: All DoD-funded research involving new and ongoing research with animals must be reviewed and approved by the USAMRMC ORP Animal Care and Use Review Office (ACURO), in addition to the local Institutional Animal Care and Use Committee (IACUC) of record. IACUC approval at the time of submission is *not* required. Specific documents relating to the use of animals in the proposed research will be requested **if the application is selected for funding**. The ACURO must review and approve all animal use prior to the start of working with animals, including amendments to ongoing projects. PIs must submit the institutional animal use protocol, IACUC approval of that protocol, and a version of the animal use appendix titled "Research Involving Animals." *Allow at least 2 to 3 months for ACURO regulatory review and approval processes for animal studies*. Refer to the General Application Instructions, Appendix 1, for additional information.

Standards for Preclinical Study Design: All projects should adhere to a core set of standards for rigorous study design and reporting to maximize the reproducibility and translational potential of preclinical research. The standards are described in Landis SC, et al. A call for transparent reporting to optimize the predictive value of preclinical research, *Nature* 2012, 490:187-191 (<a href="www.nature.com/nature/journal/v490/n7419/full/nature11556.html">www.nature.com/nature/journal/v490/n7419/full/nature11556.html</a>). While these standards are written for preclinical studies, the basic principles of randomization, blinding, sample-size estimation, and data handling derive from well-established best practices in clinical studies. Projects that include research on animal models are required to submit Attachment 8, Animal Research Plan, as part of the application package to describe how these standards will be addressed. Applicants should consult the ARRIVE (Animal Research: Reporting In Vivo Experiments) guidelines to ensure relevant aspects of rigorous animal research are adequately planned for and, ultimately, reported. The ARRIVE guidelines can be found at <a href="http://www.elsevier.com/">http://www.elsevier.com/</a>\_data/promis\_misc/622936arrive\_guidelines.pdf.

Guidelines for the Use of ALS Animal Models: Many factors must be considered in the design of studies using animal models of ALS. A number of investigators and organizations have published guidelines and recommendations for the design of ALS animal model studies. Applicants are strongly encouraged to become familiar with the concepts presented in the articles listed below and to incorporate recommendations contained therein in their study designs. While most of the recommendations pertain to the SOD1-G93A transgenic mouse model, many general concepts for using animal models for ALS research are also described:

Ludolph AC, Bendotti C, Blaugrund E, et al. 2007. Guidelines for the preclinical in vivo evaluation of pharmacological active drugs for ALS/MND: Report on the 142nd ENMC International Workshop. *Amyotrophic Lateral Sclerosis and Frontotemporal Degeneration* 8(4):217-223. http://dx.doi.org/10.1080/17482960701292837

Scott S, Kranz JE, Cole J, et al. 2008. Design, power, and interpretation of studies in the standard murine model of ALS. *Amyotrophic Lateral Sclerosis and Frontotemporal Degeneration* 9(1):4-15. <a href="http://dx.doi.org/10.1080/17482960701856300">http://dx.doi.org/10.1080/17482960701856300</a>

Ludolph AC, Bendotti C, Blaugrund E, et al. 2010. Guidelines for preclinical animal research in ALS/MND: A consensus meeting. *Amyotrophic Lateral Sclerosis and Frontotemporal Degeneration* 11(1-2):38-45. <a href="http://dx.doi.org/10.3109/17482960903545334">http://dx.doi.org/10.3109/17482960903545334</a>

The CDMRP intends that information, data, and research resources generated under awards funded by this Program Announcement be made available to the research community (which includes both scientific and consumer advocacy communities) and to the public at large. For additional guidance, refer to the General Application Instructions, Appendix 2, Section K.

Awards will be made no later than September 30, 2019. For additional information, refer to Section II.F.1, Federal Award Notices.

#### **II.C. Eligibility Information**

#### **II.C.1.** Eligible Applicants

II.C.1.a. Organization: All organizations, including international organizations, are eligible to apply.

Government Agencies Within the United States: Local, state, and Federal Government agencies are eligible to the extent that applications do not overlap with their fully funded internal programs. Such agencies are required to explain how their applications do not overlap with their internal programs.

As applications for this Program Announcement may be submitted by extramural and intramural organizations, these terms are defined below.

**Extramural Organization:** An eligible non-DoD organization. Examples of extramural organizations include academic institutions, biotechnology companies, foundations, Government, and research institutes.

**Intramural DoD Organization:** A DoD laboratory, DoD military treatment facility, and/or DoD activity embedded within a civilian medical center.

*Note:* Applications from an intramural DoD organization or from an extramural Federal organization may be submitted through a research foundation.

The USAMRAA makes awards to eligible organizations, not to individuals.

#### II.C.1.b. Principal Investigator

Independent investigators at all academic levels (or equivalent) are eligible to submit applications.

An eligible PI, regardless of ethnicity, nationality, or citizenship status, must be employed by, or affiliated with, an eligible organization.

The CDMRP encourages all PIs to participate in a digital identifier initiative through Open Researcher and Contributor ID, Inc. (ORCID). Registration for a unique ORCID identifier can be done online at <a href="http://orcid.org/">http://orcid.org/</a>.

#### II.C.2. Cost Sharing

Cost sharing/matching is not an eligibility requirement.

#### II.C.3. Other

Organizations must be able to access **.gov** and **.mil** websites in order to fulfill the financial and technical deliverable requirements of the award and submit invoices for payment.

There are no limitations on the number of applications for which an investigator may be named as a PI.

For general information on required qualifications for award recipients, refer to the General Application Instructions, Appendix 3.

Refer to <u>Section II.H.2</u>, <u>Administrative Actions</u>, for a list of administrative actions that may be taken if a pre-application or application does not meet the administrative, eligibility, or ethical requirements defined in this Program Announcement.

#### **II.D. Application and Submission Information**

Submission of applications that are essentially identical or propose essentially the same research project to different funding opportunities within the same program and fiscal year is prohibited and will result in administrative withdrawal of the duplicative application(s).

**Extramural Submission** is defined as an application submitted by an organization to Grants.gov.

*Intramural DoD Submission* is defined as an application submitted by a DoD organization to eBRAP.

#### **II.D.1. Address to Request Application Package**

eBRAP is a multifunctional web-based system that allows PIs to submit their pre-applications electronically through a secure connection, to view and edit the content of their pre-applications and full applications, to receive communications from the CDMRP, and to submit documentation during award negotiations and period of performance.

**Extramural Submissions:** Pre-application content and forms must be accessed and submitted at <a href="mailto:eBRAP.org">eBRAP.org</a>. Full application packages must be accessed and submitted at Grants.gov.

*Intramural DoD Submissions:* Pre-application content and forms and full application packages must be accessed and submitted at <u>eBRAP.org</u>.

Contact information for the CDMRP Help Desk and the Grants.gov Contact Center can be found in <u>Section II.G</u>, <u>Federal Awarding Agency Contacts</u>.

#### II.D.2. Content and Form of the Application Submission

Submission is a two-step process requiring both *pre-application* and *full application* as indicated below. The submission process should be started early to avoid missing deadlines. There are no grace periods.

**Pre-Application Submission:** All pre-applications for both extramural and intramural organizations must be submitted through eBRAP (<a href="https://eBRAP.org/">https://eBRAP.org/</a>).

**Full Application Submission:** Full applications must be submitted through the online portals as described below.

Submitting Extramural Organizations: Full applications from extramural organizations must be submitted through a Grants.gov Workspace. Applications submitted by extramural organizations (e.g., research foundations) on behalf of intramural DoD or other Federal organizations or investigators will be considered extramural submissions. Applications from extramural organizations, including non-DoD Federal organizations, received through eBRAP will be withdrawn. See definitions in Section II.C.1, Eligible Applicants.

Submitting Intramural DoD Organizations: Intramural DoD organizations may submit full applications to either eBRAP or Grants.gov. Intramural DoD organizations that are unable to submit to Grants.gov should submit through eBRAP. Intramural DoD organizations with the capability to submit through Grants.gov may submit following the instructions for extramural submissions through Grants.gov or may submit to eBRAP.

For Both Extramural and Intramural Applicants: A key feature of eBRAP is the ability of an organization's representatives and PIs to view and modify the full application submissions associated with them. eBRAP will validate full application files against the specific Program Announcement requirements, and discrepancies will be noted in an email to the PI and in the "Full Application Files" tab in eBRAP. It is the applicant's responsibility to review all application components for accuracy as well as ensure proper ordering as specified in this Program Announcement.

The application title, eBRAP log number, and all information for the PI, Business Official(s), performing organization, and contracting organization must be consistent throughout the entire pre-application and full application submission process. Inconsistencies may delay application processing and limit or negate the ability to view, modify, and verify the application in eBRAP. If any changes need to be made, the applicant should contact the CDMRP Help Desk at <a href="help@eBRAP.org">help@eBRAP.org</a> or 301-682-5507 prior to the application submission deadline.

#### II.D.2.a. Step 1: Pre-Application Submission Content

During the pre-application process, each submission is assigned a unique log number by eBRAP. This unique eBRAP log number is required during the full application submission process.

To begin the pre-application process, first select whether the submitting organization is extramural or intramural, then confirm your selection or cancel. **Incorrect selection of extramural or intramural submission type will delay processing.** 

If an error has been made in the selection of extramural versus intramural and the pre-application submission deadline has passed, the PI or Business Official must contact the CDMRP Help Desk at <a href="help@eBRAP.org">help@eBRAP.org</a> or 301-682-5507 to request a change in designation.

All pre-application components must be submitted by the PI through eBRAP (<a href="https://eBRAP.org/">https://eBRAP.org/</a>). Because the invitation to submit an application is based on the contents of the pre-application, investigators should not change the title or research objectives after the pre-application is submitted.

PIs and organizations identified in the pre-application should be the same as those intended for the subsequent application submission. If any changes are necessary after submission of the pre-application, the PI must contact the CDMRP Help Desk at <a href="help@eBRAP.org">help@eBRAP.org</a> or 301-682-5507.

PIs with an ORCID identifier should enter that information in the appropriate field in the "My Profile" tab in the "Account Information" section of eBRAP.

The pre-application consists of the following components, which are organized in eBRAP by separate tabs (refer to the General Application Instructions, Section II.B, for additional information on pre-application submission):

#### • Tab 1 – Application Information

Submission of application information includes assignment of primary and secondary research classification codes, which may be found at <a href="https://ebrap.org/eBRAP/public/Program.htm">https://ebrap.org/eBRAP/public/Program.htm</a>. Note that the codes have recently been revised. Applicants are strongly encouraged to review and confirm the codes prior to making their selection.

#### • Tab 2 – Application Contacts

Enter contact information for the PI. Enter the organization's Business Official responsible for sponsored program administration (the "person to be contacted on matters involving this application" in Block 5 of the Grants.gov SF424 (R&R) Form). The Business Official must be either selected from the eBRAP list or invited in order for the pre-application to be submitted.

Select the performing organization (site at which the PI will perform the proposed work) and the contracting organization (organization submitting on behalf of the PI, which corresponds to Block 5 on the Grants.gov SF424 (R&R) Form), and click on "Add Organizations to this

Pre-application." The organization(s) must be either selected from the eBRAP drop-down list or invited in order for the pre-application to be submitted.

It is recommended that PIs identify an Alternate Submitter in the event that assistance with pre-application submission is needed.

#### • Tab 3 – Collaborators and Key Personnel

Enter the name, organization, and role of all collaborators and key personnel associated with the application.

<u>FY18 ALSRP Programmatic Panel members</u> should not be involved in any pre-application or application. For questions related to panel members and pre-applications or applications, refer to <u>Section II.H.2.c</u>, <u>Withdrawal</u>, or contact the CDMRP Help Desk at <u>help@eBRAP.org</u> or 301-682-5507.

To preserve the integrity of its peer and programmatic review processes, the CDMRP discourages inclusion of any employee of its review contractors having any role in preapplication or application preparation, research, or other duties for submitted pre-applications or applications. For FY18, the identities of the peer review contractor and the programmatic review contractor may be found at the CDMRP website (<a href="http://cdmrp.army.mil/about/2tierRevProcess">http://cdmrp.army.mil/about/2tierRevProcess</a>). Pre-applications or applications that include names of personnel from either of these companies will be administratively withdrawn unless plans to manage conflicts of interest (COIs) are provided and deemed appropriate by the Grants Officer. Refer to the General Application Instructions, Appendix 3, for detailed information.

#### • Tab 4 – Conflicts of Interest

List all individuals other than collaborators and key personnel who may have a COI in the review of the application (including those with whom the PI has a personal or professional relationship). Refer to the General Application Instructions, Appendix 3, Section C, for further information regarding COIs.

#### • Tab 5 – Pre-Application Files

Note: Upload documents as individual PDF files unless otherwise noted. eBRAP will not allow a file to be uploaded if the number of pages exceeds the limit specified below.

• Preproposal Narrative (three-page limit): The Preproposal Narrative page limit applies to text and non-text elements (e.g., figures, tables, graphs, photographs, diagrams, chemical structures, drawings) used to describe the project. Inclusion of URLs that provide additional information to expand the Preproposal Narrative and could confer an unfair competitive advantage is prohibited and may result in administrative withdrawal of the pre-application.

The Preproposal Narrative should include the following:

- Research Strategy and Objectives: Concisely state the project's objectives and specific aims. Identify the specific lead molecule(s) (or limited group of specific lead compounds) on which the proposed development work will be based. Briefly describe the putative therapeutic mechanism of action and summarize existing data demonstrating biological activity. Describe how the action of drug candidates on a specific mechanistic target(s) will be discerned and/or how clinical progression will be determined. Describe the outcome(s) of the proposed project and potential for FDA IND submission. For applications applying to the Therapeutically Relevant Marker Option, describe how the proposed marker will demonstrate target engagement, help refine cohort selection, and/or clarify biological impact of a potential therapeutic.
- Impact: Describe how the project will make an important contribution to ALS therapeutic development. Describe in general terms how the outcomes of the project, if successful, will be translated to the clinic and made available to ALS patients.
- **Personnel:** Briefly state the qualifications of the PI, collaborators (if applicable), and other key personnel to perform the described research project.
- Pre-Application Supporting Documentation: The items to be included as supporting
  documentation for the pre-application *must be uploaded as individual files* and are
  limited to the following:
  - **References Cited (one-page limit):** List the references cited (including URLs if available) in the Preproposal Narrative using a standard reference format that includes the full citation (i.e., author[s], year published, reference title, and reference source, including volume, chapter, page numbers, and publisher, as appropriate).
  - List of Abbreviations, Acronyms, and Symbols: Provide a list of abbreviations, acronyms, and symbols used in the Preproposal Narrative.
  - Key Personnel Biographical Sketches (five-page limit per individual): All biographical sketches should be uploaded as a single combined file. Biographical sketches should be used to demonstrate background and expertise through education, positions, publications, and previous work accomplished.

#### • Tab 6 – Submit Pre-Application

This tab must be completed for the pre-application to be accepted and processed.

#### **Pre-Application Screening**

#### **Pre-Application Screening Criteria**

To determine the technical merits of the pre-application and the relevance to the mission of the DHP and the ALSRP, pre-applications will be screened based on the following criteria:

- Research Strategy and Objectives: How well the scientific rationale supports the project objectives, specific aims, and feasibility. How well the proposed research adheres to the intent of the award mechanism. Whether the pre-application identifies a specific lead compound (or limited group of specific lead compounds). To what extent the preliminary data supports the idea that the candidate compound(s) represents a potential, viable therapeutic against ALS. For applications applying to the Therapeutically Relevant Marker Option, to what extent the proposed marker will indicate the biological effect of the potential therapeutic for which it is being developed and/or predicts whether a specific therapeutic will be effective in an individual patient or patient subgroup.
- **Impact:** Whether the project will make an important contribution to development of clinical therapeutics for ALS. Whether the general steps for clinical translation of the projected outcomes of the project are adequately described.
- **Personnel:** How appropriate the qualifications of the PI, collaborators (if applicable), and other key personnel are for performing the proposed research project.

#### **Notification of Pre-Application Screening Results**

Following the pre-application screening, PIs will be notified as to whether or not they are invited to submit applications; however, they will not receive feedback (e.g., a critique of strengths and weaknesses) on their pre-application. The estimated timeframe for notification of invitation to submit an application is indicated in <u>Section I, Overview of the Funding Opportunity</u>. Invitations to submit a full application are based on the Pre-Application Screening Criteria listed above.

#### II.D.2.b. Step 2: Full Application Submission Content

Applications will not be accepted unless the PI has received notification of invitation.

The CDMRP cannot make allowances/exceptions to its policies for submission problems encountered by the applicant organization using system-to-system interfaces with Grants.gov.

Each application submission must include the completed full application package for this Program Announcement. The full application package is submitted by the Authorized Organizational Representative through Grants.gov (<a href="http://www.grants.gov/">http://www.grants.gov/</a>) for extramural organizations or through eBRAP (<a href="https://ebrap.org/">https://ebrap.org/</a>) for intramural organizations. See Table 1 below for more specific guidelines.

#### II.D.2.b.i. Full Application Guidelines

Extramural organizations must submit full applications through Grants.gov. Applicants must create a Grants.gov Workspace for submission, which allows the application components to be completed online and routed through the applicant organization for review prior to submission. Applicants may choose to download and save individual PDF forms rather than filling out webforms in the Workspace. A compatible version of Adobe Reader **must** be used to view, complete, and submit an application package consisting of PDF forms. If more than one person is entering text into an application package, the *same version* of Adobe Reader software should be used by each person. Check the version number of the Adobe software on each user's

computer to make sure the versions match. Using different versions of Adobe Reader may cause submission and/or save errors – even if each version is individually compatible with Grants.gov. Refer to the General Application Instructions, Section III, and the "Apply For Grants" page of Grants.gov (<a href="https://www.grants.gov/web/grants/applicants/apply-for-grants.html">https://www.grants.gov/web/grants/applicants/apply-for-grants.html</a>) for further information about the Grants.gov Workspace submission process. Submissions of extramural applications through eBRAP may be withdrawn.

**Table 1. Full Application Submission Guidelines** 

Extramural Submissions	Intramural DoD Submissions				
Application Package Location					
Download application package components for W81XWH-18-ALSRP-TDA from Grants.gov (http://www.grants.gov) and create a Grants.gov Workspace. The Workspace allows online completion of the application components and routing of the application package through the applicant organization for review prior to submission.	Download application package components for W81XWH-18-ALSRP-TDA from eBRAP ( <a href="https://ebrap.org">https://ebrap.org</a> ).				
Full Application Pa	ckage Components				
SF424 (R&R) Application for Federal Assistance Form: Refer to the General Application Instructions, Section III.A.1, for detailed information.	Tab 1 – Summary: Provide a summary of the application information.  Tab 2 – Application Contacts: This tab will be pre-populated by eBRAP; add Authorized Organizational Representative.				
Descriptions of each required file can be found under Full Application Submission Components:  • Attachments • Research & Related Personal Data • Research & Related Senior/Key Person Profile (Expanded) • Research & Related Budget • Project/Performance Site Location(s) Form • R&R Subaward Budget Attachment(s) Form (if applicable)	Tab 3 – Full Application Files: Upload files under each Application Component in eBRAP. Descriptions of each required file can be found under Full Application Submission Components:  • Attachments • Key Personnel • Budget • Performance Sites  Tab 4 – Application and Budget Data: Review and edit proposed project start date, proposed end date, and budget data pre-populated from the Budget Form.				

#### **Extramural Submissions**

#### **Intramural DoD Submissions**

#### **Application Package Submission**

#### Create a Grants.gov Workspace.

Add participants (investigators and Business Officials) to the Workspace, complete all required forms, and check for errors before submission.

Submit a Grants.gov Workspace Package.

An application may be submitted through Workspace by clicking the "Sign and Submit" button on the "Manage Workspace" page, under the "Forms" tab. Grants.gov recommends submission of the application package at least 24-48 hours prior to the close date to allow time to correct any potential technical issues that may discust the application submission.

disrupt the application submission.

Note: If either the Project Narrative or the budget fails eBRAP validation or if the Project Narrative or the budget needs to be modified, an updated Grants.gov application package must be submitted via Grants.gov as a "Changed/Corrected Application" with the previous Grants.gov Tracking ID prior to the application submission deadline.

Submit package components to eBRAP (https://ebrap.org).

**Tab 5 – Submit/Request Approval Full Application:** After all components are uploaded and prior to the full application submission deadline, enter your password in the space provided ("Enter Your Password Here") and press the "Submit Full Application" button. eBRAP will notify your Resource Manager/Comptroller/Task Area Manager or equivalent Business Official by email.

#### **Application Verification Period**

The full application package submitted to Grants.gov may be viewed and modified in eBRAP until the end of the application verification period. During the application verification period, the full application package, with the exception of the **Project Narrative and Budget Form**, may be modified.

After eBRAP has processed the full application, the organizational Resource Manager/Comptroller/ Task Area Manager or equivalent Business Official and PI will receive email notification of this status and will be able to view and modify application components in eBRAP. During the application verification period, the full application package, with the exception of the Project Narrative and Budget Form, may be modified. Your Resource Manager/Comptroller/Task Area Manager or equivalent Business Official should log into eBRAP to review and to approve prior to the application verification deadline.

Intramural DoD Submissions				
Further Information				
efer to the General Application Instructions, ection IV, for further information regarding BRAP requirements.				
ef				

Application viewing, modification, and verification in eBRAP are strongly recommended, but not required. *The Project Narrative and Budget cannot be changed after the application submission deadline.* Prior to the full application deadline, a corrected or modified full application package may be submitted. Other application components may be changed until the end of the application verification period. Verify that subaward budget(s) and budget justification forms are present in eBRAP during the application verification period. If these components are missing, upload them to eBRAP before the end of the application verification period. After the end of the application verification period, the full application cannot be modified.

Material submitted after the end of the application verification period, unless specifically requested by the Government, will not be forwarded for processing.

The full application package must be submitted using the unique eBRAP log number to avoid delays in application processing.

#### II.D.2.b.ii. Full Application Submission Components

#### • Extramural Applications Only

**SF424** (**R&R**) **Application for Federal Assistance Form:** Refer to the General Application Instructions, Section III.A.1, for detailed information.

#### • Extramural and Intramural Applications

#### **Attachments:**

Each attachment to the full application components must be uploaded as an individual file in the format specified and in accordance with the formatting guidelines listed in the General Application Instructions, Appendix 4.

For all attachments, ensure that the file names are consistent with the guidance. Attachments will be rejected if the file names are longer than 50 characters or have incorrect file names that contain characters other than the following: A-Z, a-z, 0-9, underscore, hyphen, space,

and period. In addition, there are file size limits that may apply in some circumstances. Individual attachments may not exceed 20 MB, and the file size for the entire full application package may not exceed 200 MB.

Attachment 1: Project Narrative (20-page limit): Upload as "ProjectNarrative.pdf." The page limit of the Project Narrative applies to text and non-text elements (e.g., figures, tables, graphs, photographs, diagrams, chemical structures, drawings) used to describe the project. Inclusion of URLs that provide additional information to expand the Project Narrative and could confer an unfair competitive advantage is prohibited and may result in administrative withdrawal of the application.

Describe the proposed project in detail using the outline below. The Project Narrative must include preliminary data relevant to the phase(s) of the preclinical development process addressed by the proposed research.

- **Background:** Provide preliminary data relevant to the phase(s) of the preclinical development as required, such as:
  - Background data supporting the putative mechanism of action as a viable therapeutic approach;
  - The chemical (or biological) identities of the lead molecules(s) or limited group of specific lead compounds;
  - Proof of identity and purity of the lead(s) (For small molecules, typically >95% by NMR, LC-MS, melting point, etc., with no single impurity >0.5%. For biologics, often by HPLC, LC-MS, immunochemistry, nucleotide or amino acid sequence analysis, etc.);
  - In-vitro biological activity and selectivity for the intended target over closely related targets (when the target is known);
  - A description of preclinical animal model(s) that can be used to assess in-vivo efficacy or desirable mechanism-specific drug activity.
- Hypothesis or Objective: State the hypothesis to be tested or the objective to be reached.
- Specific Aims: Concisely explain the project's specific aims to be funded by this award.
- Research Strategy: Describe the study design, methods, models, and analyses, including appropriate controls and statistical analyses, in sufficient detail for assessment of the application. Explain how this research strategy will meet the research goals and milestones. Describe the statistical plan including power analysis, as appropriate, for the research proposed. Address potential pitfalls and problem areas and present alternative methods and approaches. Provide a well-developed, well-integrated, and detailed research plan that supports the translational feasibility

and promise of the approach. Applications to the **Therapeutically Relevant Marker Option** should provide details of the marker effort in **Attachment 11**: **Therapeutically Relevant Marker Statement**.

Attachment 2: Supporting Documentation: Combine and upload as a single file named "Support.pdf." Start each document on a new page. If documents are scanned to PDF, the lowest resolution (100 to 150 dpi) should be used. The Supporting Documentation attachment should not include additional information such as figures, tables, graphs, photographs, diagrams, chemical structures, or drawings. These items should be included in the Project Narrative.

There are no page limits for any of these components unless otherwise noted. Include only those components described below; inclusion of items not requested or viewed as an extension of the Project Narrative will result in the removal of those items or may result in administrative withdrawal of the application.

- **References Cited:** List the references cited (including URLs, if available) in the Project Narrative using a standard reference format that includes the full citation (i.e., author[s], year published, title of reference, source of reference, volume, chapter, page numbers, and publisher, as appropriate).
- List of Abbreviations, Acronyms, and Symbols: Provide a list of abbreviations, acronyms, and symbols.
- Facilities, Existing Equipment, and Other Resources: Describe the facilities and equipment available for performance of the proposed project and any additional facilities or equipment proposed for acquisition at no cost to the award. Indicate whether or not Government-furnished facilities or equipment are proposed for use. If so, reference should be made to the original or present Government award under which the facilities or equipment items are now accountable. There is no form for this information.
- Publications and/or Patents: Include a list of relevant publication URLs and/or
  patent abstracts. If publications are not publicly available, then copies of up to five
  published manuscripts may be included in Attachment 2. Extra items will not be
  reviewed.
- Letters of Organizational Support: Provide a letter (or letters, if applicable), signed by the Department Chair or appropriate organization official, confirming the laboratory space, equipment, and other resources available for the project. Letters of support not requested in the Program Announcement, such as those from members of Congress, do not impact application review or funding decisions.
- Letters of Collaboration (if applicable): Provide a signed letter from each collaborating individual or organization that will demonstrate that the PI has the support or resources necessary for the proposed work. If an investigator at an intramural organization is named as a collaborator on an application submitted through an extramural organization, the application must include a letter from the

collaborator's Commander or Commanding Officer at the intramural organization that authorizes the collaborator's involvement.

- **Intellectual Property:** Information can be found in Code of Federal Regulations, Title 2, Part 200.315 (2 CFR 200.315), "Intangible Property."
  - Intellectual and Material Property Plan (if applicable): Provide a plan for resolving intellectual and material property issues among participating organizations.
- Use of DoD Resources (if applicable): Provide a letter of support signed by the lowest-ranking person with approval authority confirming access to active duty military patient populations and/or DoD resources or databases.
- Use of VA Resources (if applicable): Provide a letter of support from the VA Facility Director(s) or individual designated by the VA Facility Director(s), such as the ACOS/R&D or Clinical Service Chief confirming access to VA patients, resources, and/or VA research space. For VA PIs, if the VA NPC is not identified as the applicant institution for administering the funds, include a letter from the VA ACOS/R&D confirming this arrangement and identifying the institution that will administer the funds associated with the proposed research.
- Attachment 3: Technical Abstract (one-page limit): Upload as "TechAbs.pdf." The technical abstract is used by all reviewers. Abstracts of all funded research projects will be posted publicly. *Do not include proprietary or confidential information.* Use only characters available on a standard QWERTY keyboard. Spell out all Greek letters, other non-English letters, and symbols. Graphics are not allowed.

Of particular importance, programmatic reviewers typically do not have access to the full application and therefore rely on the technical abstract for appropriate description of the project's key aspects. Therefore, clarity and completeness within the space limits of the technical abstract are highly important.

#### Use the outline below:

- Background: Present the ideas and reasoning behind the proposed work. Explain the rationale for expecting the proposed therapeutic approach to be successful.
- Product: Describe the product to be developed.
- Objective/Hypothesis: State the objectives to be reached or hypothesis(es) to be tested. Provide evidence or rationale that supports the objectives/hypothesis(es).
- Specific Aims: State the specific aims of the study.
- Study Design: Briefly describe the study design including appropriate controls.

- Impact: Summarize briefly how the proposed project will impact the development of therapeutics for ALS.
- Attachment 4: Lay Abstract (one-page limit): Upload as "LayAbs.pdf." The lay abstract is used by all reviewers. Abstracts of all funded research projects will be posted publicly. *Do not include proprietary or confidential information*. Use only characters available on a standard QWERTY keyboard. Spell out all Greek letters, other non-English letters, and symbols. Graphics are not allowed.

Do not duplicate the technical abstract. Provide background information necessary for readers without scientific or medical training to readily understand the rationale and feasibility of the proposed research project. It should also clearly describe the scientific objective the project is designed to achieve.

- Describe the ultimate applicability of the research.
- What type of ALS patients will it help and how will it help them?
- What are the potential clinical applications, benefits, and risks?
- What is the projected time it may take to achieve a patient-related outcome?
- What are the likely contributions of this study in advancing the development of therapeutics for ALS?
- O Attachment 5: Statement of Work (SOW) (three-page limit): Upload as "SOW.pdf." The suggested SOW format and examples specific to different types of research projects are available on the eBRAP "Funding Opportunities & Forms" web page (https://ebrap.org/eBRAP/public/Program.htm). For the Therapeutic Development Award mechanism, use the SOW format example titled "SOW for Advanced Tech Development Research." The SOW must be in PDF format prior to attaching.
  - The SOW should include a list of major tasks that support the proposed specific aims, followed by a series of subtasks outlined related to the major tasks and milestones within the period of performance. The SOW should describe only the work for which funding is being requested by this application and, as applicable, should also:
  - Include the name(s) of the key personnel and contact information for each study site/ subaward site.
  - Indicate the number (and type) of animals and/or human anatomical samples
    projected or required for each task and at each site. Refer to the General Application
    Instructions, Appendix 1, for additional information regarding regulatory
    requirements.
  - Identify cell line(s) and commercial or organizational source(s) to be used.

- Attachment 6: Impact Statement (one-page limit): Upload as "Impact.pdf." Explain how the expected short-term and long-term outcomes of the study will make an important contribution to ALS therapeutic development. Describe how the proposed research, if successful, will contribute to a pathway toward making a clinical impact for individuals with, or at risk for, ALS, even if clinical impact is not an immediate outcome.
- Attachment 7: Transition Plan (three-page limit): Upload as "Transition.pdf."
   Describe/discuss the methods and strategies proposed to move the product to the next
   phase of development (clinical trials, commercialization, and/or delivery to the civilian or
   military market) after successful completion of the award. Outline the regulatory
   strategy. The post-award transition plan should include the components listed below.
  - The development and/or commercialization strategy.
  - The planned indication for the product label, if appropriate, and an outline of the development plan required to support that indication. Describe in detail the FDA regulatory strategy, to include considerations for compliance with GMP, Good Laboratory Practice (GLP), and Good Clinical Practice (GCP) guidelines, if appropriate.
  - Details of the funding strategy to transition to the next level of development and/or commercialization (e.g., partners, internal/external funding opportunities to be applied for).
  - For knowledge products, a description of collaborations and other resources that will be used to provide continuity of development including proposed development or modification of clinical practice guidelines (CPGs) and recommendations, provider training materials, patient brochures, and other clinical support tools, scientific journal publications, models, simulations, and applications. A "knowledge product" is a non-materiel product that addresses an identified need, topic area, or capability gap, is based on current evidence and research, aims to transition into medical practice, training, tools, or to support materiel solutions (systems to develop, acquire, provide, and sustain medical solutions and capabilities), and educates or impacts behavior throughout the continuum of care, including primary prevention of negative outcomes.
  - A schedule and milestones for transitioning the technology or knowledge product to the next level of development (next-phase clinical trials, transition to industry, delivery to the military or civilian market, incorporation into clinical practice, or approval by the FDA). Include identification of the FDA regulatory strategy (if appropriate).
  - A risk analysis for cost, schedule, manufacturability, and sustainability
- Attachment 8: Data and Research Resources Sharing Plan (one-page limit): Upload as "Sharing.pdf." Describe how data and resources generated during the performance of the project will be shared with the research community. Describe whether the proposed plan for data sharing includes databases most relevant to ALS and whether the plan

describes organizational and technical capabilities sufficient to share project data in a timely manner. Refer to the General Application Instructions, Appendix 2, Section K, for more information about the CDMRP expectations for making data and research resources publicly available. Include plans for making raw data publicly available in appropriate databases (e.g., dbGaP, GEO) at the time of publication or at the time of conclusion of the funding. The Government reserves the right to identify repositories for submission of data for archive. Any costs associated with submission will be addressed during award negotiations.

- Attachment 9: Animal Research Plan (three-page limit), if applicable: Upload as "AnimalPlan.pdf." When the proposed study involves animals, the applicant is required to submit a summary describing the animal research that will be conducted. Applicants should not submit a verbatim replica of the protocol(s) to be submitted to the IACUC as the Animal Research Plan. The Animal Research Plan should address the following points for each proposed animal study:
  - Briefly describe the research objective(s) of the animal study. Explain how and why
    the animal species, strain, and model(s) being used can address the scientific
    objectives and, where appropriate, the study's relevance to human biology.
  - Summarize the procedures to be conducted. Describe how the study will be controlled.
  - Describe the randomization and blinding procedures for the study, and any other measures to be taken to minimize the effects of subjective bias during animal treatment and assessment of results. If randomization and/or blinding will not be utilized, provide justification.
  - Provide a sample size estimate for each study arm and the method by which it was derived, including power analysis calculations.
  - Describe how data will be handled, including rules for stopping data collection, criteria for inclusion and exclusion of data, how outliers will be defined and handled, statistical methods for data analysis, and identification of the primary endpoint(s).
  - Describe how data will be reported and how it will be assured that the documentation will support a regulatory filing with the FDA, if applicable.
- Attachment 10: Collaboration Plan (one-page limit), if applicable: Upload as "Collaboration.pdf." If a collaborative project is proposed, the applicant must submit a summary of the structure and intent of the collaboration(s):
  - Describe the specific role(s) of each collaborator in the proposed project.
  - Explain why the work should be done together rather than through isolated efforts.

- Describe the expertise and resources (physical and process resources or intellectual properties) that each collaborator will bring to the effort and how they are best suited to carry out the proposed research.
- Attachment 11: Therapeutically Relevant Marker Statement, if applicable (required for applications submitted under the Therapeutically Relevant Marker Option) (no page limit): Upload as "TherapeuticRelevance.pdf." Marker reporting is often specific to the biology of a given therapeutic. Therefore, appropriate markers should be developed at the same time as the treatment approach itself.

Provide the following information for each FY18 ALSRP Therapeutic Development Award application being submitted under the Therapeutically Relevant Marker Option:

- Marker(s) Description: Describe the marker(s) and the theoretical or empirical basis for its potential utility. Markers may reference levels of analytes in fluids or samples, radiologically measured parameters, event time frames, or any other objectively measured values used to reach a single interpretation. Specify the aspect of the marker that is measured and the form in which it is used for biological interpretation.
- Purpose in ALS drug development: Describe how the proposed marker(s) will demonstrate target engagement, help refine cohort selection, and/or clarify biological impact of a potential therapeutic. At what stage of drug development is the marker intended for use and to what extent will the marker results be used to steer the development process. The inclusion of a decision-tree diagram that explicitly illustrates the application of the marker(s) and includes the actions that would be taken based on the marker results is recommended.
- Attachment 12: Representations, if applicable (extramural submissions only): Upload as "MandatoryReps.pdf." All extramural applicants must complete and submit the Required Representations template available on eBRAP (<a href="https://ebrap.org/eBRAP/public/Program.htm">https://ebrap.org/eBRAP/public/Program.htm</a>). For more information, see the General Application Instructions, Appendix 5, Section B, Representations.
- Attachment 13: DoD Military Budget Form(s), if applicable: Upload as "MFBudget.pdf." If a military facility (Military Health System facility, research laboratory, medical treatment facility, dental treatment facility, or a DoD activity embedded with a civilian medical center) will be a collaborator in performance of the project, complete the DoD Military Budget Form, available for download on the eBRAP "Funding Opportunities & Forms" web page (https://ebrap.org/eBRAP/public/Program.htm), including a budget justification, for each military facility as instructed. The costs per year should be included on the Grants.gov Research and Related Budget form under subaward costs. Refer to the General Application Instructions, Section III.A.7, for detailed information.

#### • Extramural and Intramural Applications

To evaluate compliance with Title IX of the Education Amendments of 1972 (20 USC A§1681 et seq.), the Department of Defense is collecting certain demographic and career

information to be able to assess the success rates of women who are proposed for key roles in applications in science, technology, engineering, or mathematics disciplines. To enable this assessment, each application must include the following forms completed as indicated.

**Research & Related Personal Data:** For extramural submissions (via Grants.gov) refer to the General Application Instructions, Section III.A.3 and for intramural submissions (via eBRAP), refer to the General Application Instructions, Section IV.A.2, for detailed information.

**Research & Related Senior/Key Person Profile (Expanded):** For extramural submissions (via Grants.gov), refer to the General Application Instructions, Section III.A.3, and for intramural submissions (via eBRAP), refer to the General Application Instructions, Section IV.A.2, for detailed information.

- o PI Biographical Sketch (five-page limit): Upload as "Biosketch\_LastName.pdf." The suggested biographical sketch format is available on the "Funding Opportunities & Forms" web page (<a href="https://ebrap.org/eBRAP/public/Program.htm">https://ebrap.org/eBRAP/public/Program.htm</a>) in eBRAP. The National Institutes of Health Biographical Sketch may also be used. All biographical sketches should be submitted in the PDF format that is not editable.
- o PI Previous/Current/Pending Support (no page limit): Upload as "Support LastName.pdf."
- Key Personnel Biographical Sketches (five-page limit per individual): Upload as "Biosketch\_LastName.pdf."
  - Include biographical sketches for collaborators, if applicable.
- Key Personnel Previous/Current/Pending Support (no page limit): Upload as "Support\_LastName.pdf."

**Research & Related Budget:** For extramural submissions (via Grants.gov), refer to the General Application Instructions, Section III.A.4, and for intramural submissions (via eBRAP), refer to the General Application Instructions, Section IV.A.3, for detailed information.

**Budget Justification (no page limit):** Upload as "BudgetJustification.pdf." The budget justification for the entire period of performance must be uploaded to the Research & Related Budget after completion of the budget for Period 1.

**Project/Performance Site Location(s) Form:** For extramural submissions (via Grants.gov), refer to the General Application Instructions, Section III.A.5, and for intramural submissions (via eBRAP), refer to the General Application Instructions, Section IV.A.4, for detailed information.

#### • Extramural Applications Only

**R&R Subaward Budget Attachment(s) Form (if applicable):** Refer to the General Application Instructions, Section III.A.6, for detailed information.

- Extramural Subaward: Complete the Research & Related Subaward Budget Form through Grants.gov. (Refer to the General Application Instructions, Section III.A.6, for detailed information.) Verify subaward budget(s) and budget justification forms are present in eBRAP during the application verification period. If these components are missing, upload them to eBRAP before the end of the application verification period.
- o **Intramural DoD Collaborator(s):** Complete the DoD Military Budget Form and upload to Grants.gov attachment form as Attachment 13. (Refer to the General Application Instructions, Section III.A.7, for detailed information.) Intramural DoD Collaborator(s) costs per year should be included on the Grants.gov Research and Related Budget form under subaward costs.

## II.D.3. Dun and Bradstreet Data Universal Numbering System (DUNS) Number and System for Award Management (SAM)

Applicant organizations and all subrecipient organizations must have a DUNS number to submit applications to Grants.gov. The applicant organization must also be registered in the Entity Management functional area of the SAM with an "Active" status to submit applications through the Grants.gov portal. Verify the status of the applicant organization's Entity registration in SAM well in advance of the application submission deadline. Allow 3 to 4 weeks to complete the entire SAM registration process. If an applicant has not fully complied with the requirements at the time the Federal awarding agency is ready to make a Federal award, the Federal awarding agency may determine that the applicant is not qualified to receive a Federal award and use that determination as a basis for making a Federal award to another applicant. Refer to the General Application Instructions, Section III, for further information regarding Grants.gov requirements.

#### **II.D.4. Submission Dates and Times**

All submission dates and times are indicated in <u>Section I, Overview of the Funding Opportunity</u>. Pre-application and application submissions are required. The pre-application and application submission process should be started early to avoid missing deadlines. There are no grace periods. Failure to meet either of these deadlines will result in submission rejection.

#### Applicant Verification of Full Application Submission in eBRAP

Following retrieval and processing of the full application, eBRAP will notify the organizational representatives and PI by email to log into eBRAP to review, modify, and verify the full application submission. eBRAP will validate retrieved files against the specific Program Announcement requirements and discrepancies will be noted in both the email and in the "Full Application Files" tab in eBRAP. eBRAP does not confirm the accuracy of file content. It is the applicant's responsibility to review all application components and ensure proper ordering as specified in the Program Announcement. If either the Project Narrative or the budget fails eBRAP validation or needs to be modified, an updated full application package must be

*submitted prior to the application submission deadline.* The Project Narrative and Budget Form cannot be changed after the application submission deadline.

**Extramural Submission:** The full application package submitted to Grants.gov may be viewed and modified in eBRAP until the end of the application verification period. During the application verification period, the full application package, with the exception of the Project Narrative and Budget Form, may be modified.

Intramural DoD Submission: After eBRAP has processed the full application, the organizational Resource Manager/Comptroller/Task Area Manager or equivalent Business Official and PI(s) will receive email notification of the status and will be able to view and modify application components in eBRAP. During the application verification period, the full application package, with the exception of the Project Narrative and Budget Form, may be modified. The Resource Manager/Comptroller/Task Area Manager or equivalent Business Official should log into eBRAP to review and to approve prior to the application verification deadline.

**For All Submissions:** Verify that subaward budget(s) with budget justification are present in eBRAP during the application verification period. If these components are missing, upload them to eBRAP before the end of the application verification period.

#### **II.D.5. Funding Restrictions**

The maximum period of performance is 2 years.

#### **Application submissions to the standard Therapeutic Development Award (TDA):**

• The anticipated direct costs budgeted for the entire period of performance will not exceed \$1,000,000. If indirect cost rates have been negotiated, indirect costs are to be budgeted in accordance with the organization's negotiated rate. No budget will be approved by the Government exceeding \$1,000,000 direct costs or using an indirect cost rate exceeding the organization's negotiated rate.

#### **Application submissions to the TDA with the Therapeutically Relevant Marker Option:**

- The anticipated direct costs budgeted for the entire period of performance will not exceed \$1,250,000. If indirect cost rates have been negotiated, indirect costs are to be budgeted in accordance with the organization's negotiated rate. No budget will be approved by the Government exceeding \$1,250,000 direct costs or using an indirect cost rate exceeding the organization's negotiated rate.
- A TDA application including Therapeutically Relevant Marker Option that does not meet the criteria specified for that option may be funded at the lower maximum direct costs of \$1,000,000, i.e., at the level of the standard TDA as described above.

All direct and indirect costs of any subaward or contract must be included in the total direct costs of the primary award.

The applicant may request the entire maximum funding amount for a project that may have a period of performance less than the maximum 2 years.

For this award mechanism, direct costs may be requested for (not all-inclusive):

- Salary
- Research supplies
- Clinical research costs
- Support for multidisciplinary collaborations, including travel
- Travel costs for up to two investigators to travel to two scientific/technical meetings per year to present project outcomes or disseminate project results

Awards made to extramural organizations will consist solely of assistance agreements (Cooperative Agreements and Grants). For extramural awards with an intragovernmental component, direct transfer of funds from an extramural award recipient to a DoD or other Federal agency is not allowed except under very limited circumstances. Funding to intramural DoD and other Federal agencies will be managed through a direct fund transfer. Intramural applicants are responsible for coordinating through their agency's procedures the use of contractual or assistance funding awards or other appropriate agreements to support extramural collaborators.

Refer to the General Application Instructions, Section III.A.4, for budget regulations and instructions for the Research & Related Budget. For Federal agencies or organizations collaborating with Federal agencies, budget restrictions apply as are noted in the General Application Instructions, Section III.A.4.

The CDMRP expects to allot approximately \$4.8M of the \$10M FY18 ALSRP appropriation to fund approximately three Therapeutic Development Award applications, depending on the quality and number of applications received. Funding of applications received in response to this Program Announcement is contingent upon the availability of Federal funds for this program.

Funds to be obligated on any award resulting from this funding opportunity will be available for use for a limited time period based on the fiscal year of the funds. The time is considered when establishing the award's period of performance. It is anticipated that awards made from this funding opportunity will be funded with FY18 funds, which will expire for use on September 30, 2024.

#### **II.D.6. Other Submission Requirements**

Refer to the General Application Instructions, Appendix 4, for detailed formatting guidelines.

#### **II.E. Application Review Information**

#### II.E.1. Criteria

#### II.E.1.a. Peer Review

To determine technical merit, all applications will be evaluated according to the following scored criteria, which are of **equal importance**:

#### • Research Strategy and Feasibility

- How strongly the background data presented supports the applicant's reasoning that the
  proposed therapeutic approach is feasible for advanced preclinical development and the
  extent to which the study is product-driven.
- How well the preliminary data support use of a previously identified bioactive compound or group of lead compounds.
- How well the experimental design, methods, and analyses, including statistical analyses, support the study outcomes.
- How well the applicant identifies potential problems and addresses alternative approaches.

#### If applicable to the proposed phase of development:

- How appropriate, available, and well-developed the described primary and secondary invitro bioactivity assays are for optimization or structure-activity relationship studies.
- How appropriate, available, and well-developed the described target engagement and selectivity assays are for measurement of desirable activity at the intended target, for assessing artifacts, and for assessing the potential for undesirable activities at related but unintended targets.
- How feasible the outlined chemical synthetic pathways for modification of lead compounds or the formulation of potential delivery systems are, and whether they are based on rational design.

#### For studies involving animal research:

- How well each animal study considers the guidelines for working with ALS animal models and how well it is designed to achieve the objectives, including the relevance of the model and endpoints/outcome measures to be used.
- The extent to which each study is designed to achieve reproducible and rigorous results, including controls, sample size estimation, blinding, randomization, and data handling.

• If applicable, whether data will be appropriately reported and documented to support a regulatory filing with the FDA.

#### For applications submitted to the Therapeutically Relevant Marker Option:

- How well theoretical arguments and/or empirical data support the utility of the proposed marker.
- o To what extent the proposed marker indicates the biological effect of the potential therapeutic for which it is being developed and/or predicts whether a specific therapeutic will be effective in an individual patient or patient subgroup.

#### • Impact and Transition Potential

- The extent to which this study might be expected to impact the development of therapeutics for ALS. The application should assess both short-term and long-term impact.
- Whether the schedule and milestones for bringing the product to the next level of development (next-phase clinical trials, transition to industry, delivery to the military or civilian market, incorporation into clinical practice, or approval by the FDA) are achievable.
- Whether the funding strategy described to bring the product to the next level of development (e.g., specific potential industry partners, specific funding opportunities to be applied for) is reasonable and realistic.
- Whether the proposed plan for data sharing includes databases most relevant to ALS and whether the plan describes organizational and technical capabilities sufficient to share project data in a timely manner.
- How the regulatory strategy and the development plan to support the planned product label, if applicable, are appropriate and well-described.
- Whether the risk analysis for cost, schedule, manufacturability, and sustainability is realistic and reasonable.
- How well the application identifies intellectual property ownership, describes an appropriate intellectual and material property plan among participating organizations (if applicable), and addresses any impact of intellectual property issues on product development and subsequent Government access to products supported by this Program Announcement.

#### For applications submitted to the Therapeutically Relevant Marker Option:

• The extent to which the use of the proposed marker will streamline and enhance the therapeutic development process.

- How well the application describes the aspect(s) of the marker being measured and the form in which it will be used for biological interpretation.
- How easily and reliably this marker might be implemented at multiple sites.

#### Personnel

- How appropriate the research team members' backgrounds and expertise are for development of the proposed product and conduct of the proposed research.
- o How appropriate the levels of effort are for successful conduct of the proposed work.

#### For research involving collaborations:

- How well each collaborating individual's contribution is described.
- The degree to which the proposed working relationship described in the Collaboration Plan contributes to successful attainment of project objectives.

In addition, the following unscored criteria will also contribute to the overall evaluation of the application:

#### Budget

- Whether the **direct** maximum costs are equal to or less than the applicable allowable direct maximum costs as published in the Program Announcement.
- Whether the budget is appropriate for the proposed research.

#### • Application Presentation

To what extent the writing, clarity, and presentation of the application components influence the review.

#### Environment

- If applicable, to what degree the intellectual and material property plan is appropriate.
- Whether the research requirements are supported by the availability of and accessibility to facilities and resources (including collaborative arrangements).
- Whether the quality and extent of organizational support are appropriate for the proposed research.

#### II.E.1.b. Programmatic Review

To make funding recommendations and select the application(s) that, individually or collectively, will best achieve the program objectives, the following criteria are used by programmatic reviewers:

- Ratings and evaluations of the peer reviewers
- Relevance to the mission of the DHP and FY18 ALSRP, as evidenced by the following:
  - Program portfolio composition
  - o Adherence to the intent of the award mechanism
  - o Relative impact

#### **II.E.2. Application Review and Selection Process**

All applications are evaluated by scientists, clinicians, and consumers in a two-tier review process. The first tier is peer review of applications against established criteria for determining technical merit. Each application is evaluated for its own merit, independent of other applications. The second tier is a programmatic review that makes recommendations for funding to the Commanding General, USAMRMC, on behalf of the DHA and the OASD(HA), based on technical merit, the relevance to the mission of the DHP and ALSRP, the specific intent of the award mechanism, and to other specified evaluation criteria in the Program Announcement. Programmatic review is a comparison-based process in which applications with scientific and technical merit compete in a common pool. *The highest-scoring applications from the first tier of review are not automatically recommended for funding. Funding recommendations depend on various factors as described in Section II.E.1.b, Programmatic Review.* Additional information about the two-tier process used by the CDMRP can be found at <a href="http://cdmrp.army.mil/about/fundingprocess">http://cdmrp.army.mil/about/fundingprocess</a>.

All CDMRP review processes are conducted confidentially to maintain the integrity of the merit-based selection process. Panel members sign a statement that application and evaluation information will not be disclosed outside the panel. Violations of confidentiality can result in the dissolving of a panel(s) and other corrective actions. In addition, personnel at the applicant or collaborating organizations are prohibited from contacting persons involved in the review and approval process to gain protected evaluation information or to influence the evaluation process. Violations of these prohibitions will result in the administrative withdrawal of the organization's application. Violations by panel members or applicants that compromise the confidentiality of the review and approval process may also result in suspension or debarment from Federal awards. Furthermore, the unauthorized disclosure of confidential information of one party to another third party is a crime in accordance with 18 USC 1905.

#### **II.E.3.** Integrity and Performance Information

Prior to making an assistance agreement award where the Federal share is expected to exceed the simplified acquisition threshold (currently \$150,000) over the period of performance, the Federal awarding agency is required to review and consider any information about the applicant that is available in the Federal Awardee Performance and Integrity Information System (FAPIIS).

An applicant organization may review FAPIIS, accessible through SAM, and submit comments to FAPIIS on any information about the organization that a Federal awarding agency previously entered and is currently available in FAPIIS.

The Federal awarding agency will consider any comments by the applicant, in addition to other information in the designated integrity and performance system, in making a judgment about the applicant's integrity, business ethics, and record of performance under Federal awards when determining a recipient's qualification prior to award, according to the qualification standards of the Department of Defense Grant and Agreement Regulations (DoDGAR), Section 22.415.

#### **II.E.4.** Anticipated Announcement and Federal Award Dates

All application review dates and times are indicated in <u>Section I, Overview of the Funding</u> Opportunity.

Each PI and organization will receive email notification of posting of the funding recommendation in eBRAP. Each PI will receive a peer review summary statement on the strengths and weaknesses of the application.

#### II.F. Federal Award Administration Information

#### **II.F.1. Federal Award Notices**

Awards will be made no later than September 30, 2019. Refer to the General Application Instructions, Appendix 2, for additional award administration information.

After email notification of application review results through eBRAP, and if selected for funding, a representative from the USAMRAA will contact the business official authorized to negotiate on behalf of the PI's organization.

Only an appointed USAMRAA Grants Officer may obligate the Government to the expenditure of funds. No commitment on the part of the Government should be inferred from discussions with any other individual. The award document signed by the Grants Officer is the official authorizing document.

Federal Organizations: Awards to Federal Government organizations (to include intramural DoD organizations) will be executed through the Military Interdepartmental Purchase Request (MIPR) or Funding Authorization Document (FAD) process. Transfer of funds is contingent upon appropriate safety and administrative approvals. Intramural applicants and collaborators are reminded to coordinate receipt and commitment of funds through their respective Resource Manager/Task Area Manager/Comptroller or equivalent Business Official.

After email notification of application review results through eBRAP, and if selected for funding, a representative from the CDMRP will contact the business official authorized to negotiate on behalf of the PI's organization.

#### **II.F.1.a.** PI Changes and Award Transfers

Unless otherwise restricted, changes in PI or organization will be allowed at the discretion of the USAMRAA Grants Officer, provided that the intent of the award mechanism is met. An

organizational transfer of an award will not be allowed in the last year of the (original) period of performance or any extension thereof.

Refer to the General Application Instructions, Appendix 2, Section B, for general information on organization or PI changes.

#### **II.F.2.** Administrative and National Policy Requirements

Applicable requirements in the DoDGAR found in 32 CFR, Chapter 1, Subchapter C, and 2 CFR, Chapter XI, apply to grants and cooperative agreements resulting from this Program Announcement.

Refer to the General Application Instructions, Appendix 2, for general information regarding administrative requirements.

Refer to the General Application Instructions, Appendix 5, for general information regarding national policy requirements.

Refer to full text of the <u>USAMRAA General Research Terms</u> and <u>Conditions</u> with <u>Institutions</u> of <u>Higher Education</u>, <u>Hospitals</u>, and <u>Non-Profit Organizations</u>: Addendum to the DoD R&D Terms and Conditions and the <u>USAMRAA General Research Terms</u> and <u>Conditions</u> with <u>For-Profit Organizations</u> for further information.

#### II.F.3. Reporting

Refer to the General Application Instructions, Appendix 2, Section A, for general information on reporting requirements. If there are technical reporting requirement delinquencies for any existing USAMRAA-sponsored awards at the applicant organization, no new awards will be issued to the applicant organization until all delinquent reports have been submitted.

Annual progress reports as well as a final progress report will be required.

In addition to written progress reports, Annual Award Charts will be required. For the Therapeutic Development Award mechanism, use the format example titled, "Award Charts," available on the eBRAP "Funding Opportunities & Forms" web page (https://ebrap.org/eBRAP/public/Program.htm).

Award Expiration Transition Plan: An Award Expiration Transition Plan must be submitted with the final progress report. Use the one-page template titled "Award Expiration Transition Plan," available on the on the eBRAP "Funding Opportunities & Forms" web page (https://ebrap.org/eBRAP/public/Program.htm) under the "Progress Report Formats" section.

Awards resulting from this Program Announcement will incorporate additional reporting requirements related to recipient integrity and performance matters. Recipient organizations that have Federal contract, grant, and cooperative agreement awards with a cumulative total value greater than \$10,000,000 are required to provide information to FAPIIS about certain civil, criminal, and administrative proceedings that reached final disposition within the most recent 5-year period and that were connected with performance of a Federal award. Recipients are

required to disclose semiannually information about criminal, civil, and administrative proceedings as specified in the applicable Terms and Conditions (see General Application Instructions, Section III.A.4).

#### **II.G. Federal Awarding Agency Contacts**

#### II.G.1. CDMRP Help Desk

Questions related to Program Announcement content or submission requirements as well as questions related to the pre-application or intramural application submission through eBRAP should be directed to the CDMRP Help Desk, which is available Monday through Friday from 8:00 a.m. to 5:00 p.m. ET. Response times may vary depending upon the volume of inquiries.

Phone: 301-682-5507

Email: <a href="mailto:help@eBRAP.org">help@eBRAP.org</a>

#### **II.G.2.** Grants.gov Contact Center

Questions related to extramural application submission through Grants.gov portal should be directed to the Grants.gov Contact Center, which is available 24 hours a day, 7 days a week (closed on U.S. Federal holidays). Note that the CDMRP Help Desk is unable to provide technical assistance with Grants.gov submission.

Phone: 800-518-4726; International 1-606-545-5035

Email: support@grants.gov

Sign up on Grants.gov for "send me change notification emails" by following the link on the "Synopsis" page for the Program Announcement or by responding to the prompt provided by Grants.gov when first downloading the Grants.gov application package. If the Grants.gov application package is updated or changed, the original version of the application package may not be accepted by Grants.gov.

#### **II.H. Other Information**

#### II.H.1. Program Announcement and General Application Instructions Versions

Questions related to this Program Announcement should refer to the Program name, the Program Announcement name, and the Program Announcement version code 20180329b. The Program Announcement numeric version code will match the General Applications Instructions version code 20180329.

#### **II.H.2. Administrative Actions**

After receipt of pre-applications or applications, the following administrative actions may occur:

#### II.H.2.a. Rejection

The following will result in administrative rejection of the pre-application:

Preproposal Narrative is missing.

The following will result in administrative rejection of the application:

- Submission of an application for which a letter of invitation was not received.
- Project Narrative exceeds page limit.
- Project Narrative is missing.
- Budget is missing.

#### II.H.2.b. Modification

- Pages exceeding the specific limits will be removed prior to review for all documents other than the Project Narrative.
- Documents not requested will be removed.

#### II.H.2.c. Withdrawal

The following may result in administrative withdrawal of the pre-application or application:

- An FY18 ALSRP Programmatic Panel member is named as being involved in the research proposed or is found to have assisted in the pre-application or application processes including, but not limited to, concept design, application development, budget preparation, and the development of any supporting documentation. A list of the FY18 ALSRP Programmatic Panel members can be found at <a href="http://cdmrp.army.mil/alsrp/panels/panels18">http://cdmrp.army.mil/alsrp/panels/panels18</a>.
- The application fails to conform to this Program Announcement description to the extent that appropriate review cannot be conducted.
- Inclusion of URLs, with the exception of links in References Cited and Publication and/or Patent Abstract sections.
- Page size is larger than 8.5 inches x 11.0 inches (approximately 21.59 cm x 27.94 cm).
- To preserve the integrity of its peer and programmatic review processes, the CDMRP discourages inclusion of any employee of its review contractors having any role in the preparation, research or other duties for submitted applications. For FY18, the identities of the peer review contractor and the programmatic review contractor may be found at the CDMRP website (<a href="http://cdmrp.army.mil/about/2tierRevProcess">http://cdmrp.army.mil/about/2tierRevProcess</a>). Applications that include names of personnel from either of these companies will be administratively withdrawn unless

plans to manage COIs are provided and deemed appropriate by the Grants Officer. Refer to the General Application Instructions, Appendix 3, for detailed information.

- Personnel from applicant or collaborating organizations are found to have contacted persons involved in the review or approval process to gain protected evaluation information or to influence the evaluation process.
- Applications from extramural organizations, including non-DoD Federal agencies, received through eBRAP may be withdrawn.
- Applications submitted by an intramural DoD organization may be withdrawn if the intramural organization cannot coordinate the use of contractual, assistance, or other appropriate agreements to provide funds to extramural collaborators.
- Submission of the same research project to different funding opportunities within the same program and fiscal year.
- The invited application does not propose the same research project described in the preapplication.
- An application for which the PI does not meet the eligibility criteria will be withdrawn.
- The application includes a clinical trial.

#### II.H.2.d. Withhold

Applications that appear to involve research misconduct will be administratively withheld from further consideration pending organizational investigation. The organization will be required to provide the findings of the investigation to the USAMRAA Grants Officer for a determination of the final disposition of the application.

### II.H.3. Application Submission Checklist

Application Components	Action	Completed
SF424 (R&R) Application for Federal Assistance (Extramural submissions only)	Complete form as instructed.	
Summary (Tab 1) and Application Contacts (Tab 2) (Intramural submissions only)	Complete these tabs as instructed.	
Ţ.	Project Narrative: Upload as Attachment 1 with file name "ProjectNarrative.pdf."	
	Supporting Documentation: Upload as Attachment 2 with file name "Support.pdf."	
	Technical Abstract: Upload as Attachment 3 with file name "TechAbs.pdf."  Law Abstract: Upload as Attachment 4 with	
	Lay Abstract: Upload as Attachment 4 with file name "LayAbs.pdf."	
	Statement of Work: Upload as Attachment 5 with file name "SOW.pdf."	
	Impact Statement: Upload as Attachment 6 with file name "Impact.pdf"	
	Transition Plan: Upload as Attachment 7 with file name "Transition.pdf"	
Attachments	Data and Research Resources Sharing Plan Statement: Upload as Attachment 8 with file name "SharingPlan.pdf"	
	Animal Research Plan: Upload as Attachment 9 with file name "AnimalPlan.pdf," if applicable.	
	Collaboration Plan: Upload as Attachment 10 with file name "Collaboration.pdf," if applicable.	
	Therapeutically Relevant Marker Statement: Upload as Attachment 11 with file name	
	"TherapeuticRelevance.pdf," if applicable.  Representations (extramural submissions	
	only): Upload as Attachment 12 with file name "MandatoryReps.pdf," if applicable.	
	DoD Military Budget Form(s): Upload as Attachment 13 with file name "MFBudget.pdf," if applicable.	
Research & Related Personal Data	Complete form as instructed.	

<b>Application Components</b>	Action	Completed
Research & Related Senior/Key Person Profile (Expanded)	Attach PI Biographical Sketch (Biosketch_LastName.pdf) to the appropriate field.	
	Attach PI Previous/Current/Pending Support (Support_LastName.pdf) to the appropriate field.	
	Attach Biographical Sketch (Biosketch_LastName.pdf) for each senior/key person to the appropriate field.	
	Attach Previous/Current/Pending (Support_LastName.pdf) for each senior/key person to the appropriate field.	
Research & Related Budget (Extramural submissions only)	Complete as instructed. Attach Budget Justification (BudgetJustification.pdf) to the appropriate field.	
Budget (Intramural submissions only)	Complete the DoD Military Budget Form and justification.	
Project/Performance Site Location(s) Form	Complete form as instructed.	
R&R Subaward Budget Attachment(s) Form, if applicable	Complete form as instructed.	

#### APPENDIX 1: ACRONYM LIST

ACURO Animal Care and Use Review Office

ADME Absorption, Distribution, Metabolism, and Excretion

ALS Amyotrophic Lateral Sclerosis

ALSRP Amyotrophic Lateral Sclerosis Research Program
CDMRP Congressionally Directed Medical Research Programs

CFR Code of Federal Regulations

COI Conflict of Interest

CPG Clinical Practice Guideline
DHA Defense Health Agency
DHP Defense Health Program
DoD Department of Defense

DoDGAR Department of Defense Grant and Agreement Regulations

DUNS Data Universal Numbering System

eBRAP Electronic Biomedical Research Application Portal

EC Ethics Committee ET Eastern Time

FAD Funding Authorization Document

FAPIIS Federal Awardee Performance and Integrity Information System

FDA Food and Drug Administration

FY Fiscal Year

GCP Good Clinical Practice
GLP Good Laboratory Practice
GMP Good Manufacturing Practice
HRPO Human Research Protection Office

IACUC Institutional Animal Care and Use Committee

IDE Investigational Device Exemption

IND Investigational New Drug
IRB Institutional Review Board

M Million

MIPR Military Interdepartmental Purchase Request

NPC Non-Profit Corporation

OASD(HA) Office of the Assistant Secretary of Defense for Health Affairs

ORCID Open Researcher and Contributor ID, Inc.

ORP Office of Research Protections

PI Principal Investigator

RDT&E Research, Development, Test, and Evaluation

SAM System for Award Management

SOW Statement of Work

USAMRAA U.S. Army Medical Research Acquisition Activity
USAMRMC U.S. Army Medical Research and Materiel Command

USC United States Code

DoD FY18 Amyotrophic Lateral Sclerosis Therapeutic Development Award